Confined Animal Facilities

From Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters (EPA 840-B-92-002 January 1993)

Management Measure for Facility Wastewater and Runoff from Confined Animal Facility Management (Large Units)

Limit the discharge from the confined animal facility to surface waters by:
(1) Storing both the facility wastewater and the runoff from confined animal facilities that is caused by storms up to and including a 25-year, 24-hour frequency storm. Storage structures should:

(a) Have an earthen lining or plastic membrane lining, or

(b) Be constructed with concrete, or (c) Be a storage tank; and

(2) Managing stored runoff and accumulated solids from the facility through an appropriate waste utilization system.

Management Measure for Facility Wastewater and Runoff from Confined Animal Facility Management (Small Units)

Design and implement systems that collect solids, reduce contaminant concentrations, and reduce runoff to minimize the discharge of contaminants in both facility wastewater and in runoff that is caused by storms up to and including a 25-year, 24-hour frequency storm. Implement these systems to substantially reduce significant increases in pollutant loadings to ground water. Manage stored runoff and accumulated solids from the facility through an appropriate waste utilization system.

From NOAA/EPA's January 13, 1998 Findings

Confined Animal Facilities (large and small units)

Finding: Oregon's program for confined animal facilitates includes management measures in conformity with the 6217(g) guidance and enforceable policies and mechanisms to ensure implementation throughout the 6217 management area for confined animal facilities where animals are confined for four months or more and where waste water control facilities are present. The State does not have management measures for facilities where animals are confined for less than four months and that do not have prepared surfaces or waste water control facilities. For these latter facilities, the State has identified a backup enforceable authority but has not demonstrated the ability of the authority to ensure implementation throughout the 6217 management area.

Condition: Within two years, Oregon will include in its program management measures in conformity with the 6217 (g) guidance for facilities where animals are confined for less than four months and that do not have prepared surfaces or waste water control facilities. Also within two years, Oregon will provide a strategy (in accordance with section XII, pages 19-20) for use of the State's water quality law (ORS 468B) as a back-up enforceable mechanism to ensure implementation of the management measures for confined animal facilities as proposed on pages 48-50 of the State's program submittal.

Id

From NOAA/EPA's January 13, 2004 Interim Approvals Document

Interim Approval Finding: Oregon has satisfied this condition (January 2004).
The Oregon Legislature adopted House Bill (HB) 2156 in 2001, amending ORS 468B to define confined animal feeding operations according to rules established by the Oregon Department of Environmental Quality (DEQ) and Oregon Department of Agriculture (ODA) and to require that the definition distinguish between various categories of operations, including those regulated by NPDES permits. The new definition removes the exclusion for combined animal feeding operations (CAFOs) where animals are confined for less than four months and that do not have prepared surfaces or waste water facilities. OAR 603-074 establishes rules for administering the CAFO program, including enforcement against water quality violations. Since 1999, ODA has conducted annual inspections of permitted CAFOs. There are six inspectors; three of the inspectors cover some part of the coast. An inspector based in Tillamook services the northern portion of the CNPCP area. The state also has a complaint-driven enforcement process and an educational outreach program. The Oregon Legislature adopted House Bill (HB) 2156 in 2001, amending ORS 468B to define confined animal feeding operations according to rules established by the Oregon Department of Environmental Quality (DEQ) and Oregon Department of Agriculture (ODA) and to require that the definition distinguish between various categories of operations, including those regulated by NPDES permits. The new definition removes the exclusion for combined animal feeding operations (CAFOs) where animals are confined for less than four months and that do not have prepared surfaces or waste water facilities. OAR 603-074 establishes rules for administering the CAFO program, including enforcement against water quality violations. Since 1999, ODA has conducted annual inspections of permitted CAFOs. There are six inspectors; three or four of the inspectors cover some part of the coast. An inspector based in Tillamook services the northern portion of the CNPCP area. The state also has a complaint-driven enforcement process and an educational outreach program.

Comments Pertaining to CAFOs

NWEA May 2, 2012 (pages 24-28)
Comment:
Oregon Fails to Adequately Regulate Confined Animal Facilities
…Perhaps on paper, Oregon has made a sufficient case that CAFOs are adequately regulated but on-the-ground there was and continues to be another reality. The Tillamook subbasin in Oregon's North Coast Basin, is an excellent example of the combined failures of the joint permitting programs of DEQ and ODA to restrict manure generated by CAFOs from entering surface waters.

Argument:
In 2000, …. ODA adopted the AWQMAP for the North Coast Basin, including the Tillamook, resulting in critical comments by EPA about whether management measures would apply to all waters or just impaired waters and expressing concern about the generality of the basin rules."[92] Specifically, EPA observed

> The livestock and grazing measure Required and Prohibited Conditions are rather weak, which seems to be quite inadequate given the number of head of cattle in Tillamook Co. The Tillamook Bay NEP identifies water quality and habitat issues related to livestock and other agricultural activities as priority problems. * * *
> The nutrient management measures is also very weak in that it does not include any CAFO requirements.

Id

Despite EPA's concerns, the federal agencies determined later that year that Oregon had met the conditions for CAFOs. And despite the finding, the agencies continued to express doubts: "EPA and NOAA would like information on how ODA will implement the CAFO program, including both permitted and non-permitted facilities, particularly in the coastal nonpoint management area." Likewise, given that ODA had claimed "the SB 1010 planning process will be available for back-up enforcement as needed," the federal agencies sought "confirmation that DEQ and ODA are committed to revisions over time [to the AWQMAPs] so that comprehensive treatment of the nutrient management measure is included" and expressed concern that the AWQMAPs "do not ensure the widespread and comprehensive implementation of all the management measures." Oddly, the federal agencies appear to have granted interim approval to Oregon's programs regarding livestock while maintaining all or nearly all of their initial skepticism.

Despite the significant infusion of federal money through the Clean Water Act's section 320 National Estuary Program (NEP) to the Tillamook Estuaries Partnership (TEP), beginning in 1994 – over 17 years ago – bacterial pollution of the Tillamook Bay has not improved over the years... There, the TEP finds that the Tillamook River watershed has "some of the highest *E. coli* levels in the region" and that levels are increasing at a number of enumerated sites. The TEP quotes Dr. Orin C. Shanks, a researcher on Tillamook bacteria, that "a watershed manager's best strategy for decreasing indicators of fecal pollution in this watershed is to mitigate runoff from ruminant sources," while not urging any regulatory actions to compensate for the failures of what is essentially a voluntary approach (despite the NPDES permits). Yet, despite the studies, the special federal funding, the educational programs and outreach, the AWQMAP and ODA basin rules, and the assurances of no fewer than two state agencies in charge of regulating the discharges of permitted CAFOs, no progress in reducing bacteria pollution has been made.

In 2006, Dr. Shanks published a report on the widespread fecal contamination of the Tillamook Bay. While there are human sources of *E. coli* in the bay, animal sources remain the significant sources of fecal contamination:

> More than one-quarter of all sampling sites were in violation of the Oregon water quality standard for *E. coli* counts. All of these sites are situated near known human point sources or agricultural operations. For example, the values for four sampling sites along the Tillamook River, affected by rural residential areas and more than 30 CAFO facilities, exceeded the Oregon *E. coli* standards more than 75% of the time, suggesting that this portion of the river is severely polluted throughout the year. *E. coli* counts were also very high at two sites that were affected by urban and agriculture activities, including sampling sites that were the farthest downstream along the Kilchis River (Kilchis-5; 446 MPN/100 ml) and the Trask River (Trask-4; 345 MPN/100 ml) near a slough adjacent to the city of Tillamook. The values for two bay sites (Bay-1 and -2) routinely exceeded the recreational use standard; these sites are near the confluence of the Tillamook and Trask rivers, two of the most polluted rivers according to the *E. coli* counts.

The Tillamook is just one, albeit significant, example of the failures of the Oregon CAFO program. Recently the Animal Law Clinic at Lewis and Clark Law School issued a report on the program that evaluated, *inter alia*, the lack of capacity and resources associated with the Oregon program. The report found Oregon lacked adequate enforcement authority and public participation in permitting, and it failed to investigate complaints and carry out adequate inspection and monitoring. Moreover, ODA apparently has an extremely limited view as to what enforcement actions it can take to address CAFOs with ongoing violations and whether it is compelled to reissue NPDES permits to CAFOs which have a history of noncompliance. The report found further that "ODA is incapable of meeting the many requirements of a comprehensive NPDES program" including inspection and compliance. ODA also suffers from a culture that avoids enforcement, as with its basin rules, "rarely [having] brought administrative actions and, when it has, almost never assessed fines," regardless of repeat offenses. In addition,

Id

Oregon's general permit fails to require all but large CAFOs to sample the nitrogen and phosphorus levels of their manure, litter, and process wastewater, both land applied and exported. Smaller CAFOs are only required to sample soil from their land application areas. Further, mortality management, contact between animals and U.S. waters, and projected future conservation practices are only accounted for to the extent that each AQWMAP "must, to the extent applicable" include protocols for maintaining these records.

Based on the complete failure of the ODA to resolve the water quality problems largely created by the dairy farms in the Tillamook, the DEQ must step in and be prepared to use enforcement authority to implement its TMDL. Nothing short of a demonstration that this authority can and will be used is sufficient to meet the requirements of CZARA given the long standing failures of the current program.

NWEA, December 14, 2012 (pages 1-2 & video)
Comment: ***Regulating the dairy industry in Oregon's coastal watersheds has not been "straightforward" and neither has it been successful. Yet Oregon must demonstrate that it has both the legal authority and a commitment to use the existing enforcement authorities where necessary in order to gain approval of its coastal nonpoint program under CZARA. Given the passage of time since the NEP began and the TMDL was approved by EPA, the federal agencies must see substantial movement by Oregon DEQ to curtail the dairy wastes that foul coastal waters on a regular basis. Relying on anything less to support a federal approval action would be inconceivable under the circumstances.***

SRAP (Commenter #65), March 20, 2014 (page 1-2)
Comment: ***Oregon does not have basic management measures for agriculture in place because the State fails to adequately regulate CAFOs.***

Argument:
Animal Agriculture is a contributing nonpoint source threat to Oregon's coastal Waters.
While CZARA regulates coastal *nonpoint* sources, concentrated animal feeding operations ("CAFOs") are *both* nonpoint sources and point sources. The federal Clean Water Act ("CWA") defines CAFOs as potential point sources and requires them to be permitted and regulated under the federal National Pollutant Discharge Elimination System ("NPDES") program under certain conditions. However, CAFOs also pose a tremendous nonpoint source problem. By EPA's own estimates, the annual production of manure produced by animal confinement facilities exceeds that produced by humans by at least three times. The majority of discharge from CAFOs result from the inevitable over-application to soil of the volumes of untreated manure and the resulting runoff into water systems. Manure in such large quantities carries excess nutrients, chemicals, and microorganisms that find their way into waterways, lakes, groundwater, soils, and airways.

Oregon does not have basic management measures for agriculture in place because the State fails to adequately regulate CAFOs.
Water quality impairments from agriculture activities within the coastal nonpoint management area are widespread and the State's programs and policies do not adequately meet the 6217(g) management measures for agriculture to protect coastal waters. There are systemic problems within the State's agricultural water quality management program because Oregon fails to adequately regulate CAFOs. Additionally, it is unclear what enforcement actions regarding agriculture have been taken in the coastal nonpoint management area and what improvements resulted from those actions.

Id

In Oregon, the state Department of Agriculture ("ODA") is essentially the agency administering and enforcing the federal Clean Water Act program for CAFOs. However, an extensive study conducted by the Animal Law Clinic at Lewis and Clark Law School ("Report") in 2011 reported that ODA lacks federal authorization to manage the federal NPDES program. Based on independent research, information from ODA files and documents from Region 10 EPA's response to a Freedom of Information Act request, the Report found the State's program to be lacking in a variety of areas, including ODA's system of investigating discharge complaints, inadequate inspections and monitoring, knowledge, and resources. Enforcement of agricultural water quality in Oregon is limited and largely complaint-driven. In addition to numerous documented examples of actual pollution, complaints against certain facilities are repeatedly submitted with no follow-up done or recorded. ODA itself acknowledges difficulties due to the limited number of inspectors available to cover all CAFOs and the broad number of facilities regulated under the general NPDES permit. Given this resource shortage, complaints serve to bring potential violators to ODA's attention. Unfortunately many complainants report that ODA is unresponsive and dismissive of their concerns. It is not uncommon then, for complainants to give up reporting discharges despite witnessing continuous problems. These examples do not just demonstrate that CAFOs lack enforcement, but that Oregon's agricultural water quality program is severely inadequate.

Oregon's Agricultural Water Quality Management Area (AWQMA) Plans are insufficient to meet CZARA.
CZARA 6217(g)(5) defines "management measures" as economically achievable measures to control pollution from nonpoint sources that reflect the greatest degree of pollution reduction achievable through the application of best available practices, technologies, processes, siting, operating methods or other alternatives. However, Oregon fails to ensure basic management measures are in place. For example, Management Measure B1.3. states that Oregon will "[p]rovide a strategy to use the state's water quality law as a back-up mechanism for implementation of the CAFO measure." However, Oregon's Agricultural Water Quality Management Area ("AWQMA") plan is entirely voluntary. "The rules adopted under this subsection shall constitute the only enforceable aspects of a water quality management plan." O.R.S. § 568.912(1). "Area rules are the only enforceable aspect of an AWQMA plan." O.A.R. 603-090-0000 (4). And this voluntary program is not backed up by any legal enforcement authority to regulate nonpoint sources as EPA/NOAA requires.11 The federal agencies' policy regarding this needed "back-up" enforcement is set out in their 1998 policy document, Administrative Changes to the Coastal Nonpoint Pollution Control Program Guidance for Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990.

Id